

IN THE CLAIMS:

Please amend claim 15. This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Previously Presented) A transgenic mouse comprising a modified glycoprotein V (GP V) gene, wherein the mouse's genome has a homozygous modification with a construct which removes a sequence of GP V gene comprising nucleotides encoding Met 1 to Leu 389 of SEQ ID NO:12 and wherein said mouse has platelets with an increased aggregation response to a low concentration of thrombin compared to platelets from a mouse homozygous for the wild type GP V gene.
2. (canceled)
3. (Previously Presented) Platelets isolated from blood plasma of the mouse of claim 1.
4. (canceled)
5. (Previously Presented) A method of preparing a transgenic mouse comprising a modified glycoprotein V gene, wherein the mouse's genome has a homozygous modification with a construct which removes a sequence of GP V gene comprising nucleotides encoding Met 1 to Leu 389 of SEQ ID NO:12, said method comprising:
 - a) introducing into embryonic stem cells a nucleic acid molecule comprising a construct which removes a sequence of GP V gene comprising nucleotides encoding Met 1 to Leu 389 of SEQ ID NO:12;
 - b) generating a transgenic mouse from the cells resulting from step a);
 - c) breeding the transgenic mouse to obtain a transgenic mouse homozygous for the modified GP V gene; and
 - d) determining that platelets from the homozygotic transgenic mouse have an increased aggregation response to a low concentration of thrombin compared to platelets from a mouse homozygous for the GP V gene.
6. – 9. (canceled)
10. (Previously Presented) A method of preparing a transgenic mouse comprising a nonfunctional glycoprotein V gene, wherein the mouse's genome has a homozygous

modification with a construct which removes a sequence of GP V gene comprising nucleotides encoding Met 1 to Leu 389 of SEQ ID NO:12, said method comprising:

- a) introducing into embryonic stem cells a nucleic acid molecule comprising a construct which removes a sequence of GP V gene comprising nucleotides encoding Met 1 to Leu 389 of SEQ ID NO:12 ~~gene~~ and a selectable marker;
- b) identifying and selecting transformed cells;
- c) injecting the transformed cells from step b) into blastocysts;
- d) generating a transgenic mouse from the blastocysts of step c), wherein the generated transgenic mouse is chimeric for the nonfunctional GP V gene and wherein said mouse has platelets with an increased aggregation response to a low concentration of thrombin compared to platelets from a mouse homozygous for the wild type GP V gene;
- e) breeding the chimeric mouse with a wild-type mouse to produce a mouse heterozygotic for the nonfunctional GP V gene;
- f) crossing a heterozygotic mouse produced in step e) with a mouse which is chimeric or heterozygotic for the nonfunctional GP V gene; and
- g) selecting a mouse homozygotic for the nonfunctional GP V gene from the resulting progeny.

11. – 14. (canceled)

15. (Currently Amended) A method to identify an agent that modulates a thrombotic response of a transgenic ~~mouse's genome having~~ mouse whose genome has a modified GP V gene, wherein the mouse has a homozygous modification with a construct which removes a sequence of GP V gene comprising nucleotides encoding Met 1 to Leu 389 of SEQ ID NO:12 and wherein said mouse has platelets with an increased aggregation response to a low concentration of thrombin compared to platelets from a mouse homozygous for the wild type GP V gene, comprising the step of exposing the mouse to the agent and determining whether the agent modulates the thrombotic response.

16 – 20. (canceled)

21. (Previously Presented) A method of determining the effect of an agent on a characteristic of a mouse that is attributable to the expression of the GP V gene, wherein the mouse's genome has a homozygous modification with a construct which removes a sequence of GP V gene comprising nucleotides encoding Met 1 to Leu 389 of SEQ ID NO:12 and wherein said mouse has platelets with an increased aggregation response to a low concentration of thrombin compared to platelets from a mouse homozygous for the wild type GP V gene, and wherein said characteristic is platelet function, said method comprising;

- a) administering said agent to the mouse of claim 1;
- b) maintaining said mouse for a desired period of time after said administration; and,
- c) determining whether the characteristic of said mouse that is attributable to the expression of the modified GP V gene has been affected by the administration of said agent.

22. (canceled)

23. (Previously Presented) A cell isolated from a transgenic mouse that comprises a transgene stably integrated into the mouse's genome, said transgene encoding a modified glycoprotein V gene, wherein the mouse's genome has a homozygous modification with a construct which removes a sequence of GP V gene comprising nucleotides encoding Met 1 to Leu 389 of SEQ ID NO:12 and wherein said mouse has platelets with an increased aggregation response to a low concentration of thrombin compared to platelets from a mouse homozygous for the wild type GP V gene.

24. - 25. (canceled)

26. (Previously Presented) The mouse of claim 1, wherein said mouse is fertile and transmits the modified GP V gene to its offspring.

27. (Canceled)

28. (Previously Presented) A method of determining the effect of an agent on a characteristic of a mouse that is attributable to the expression of the GP V gene, wherein the mouse's genome has a homozygous modification with a construct which removes a sequence of GP V gene comprising nucleotides encoding Met 1 to Leu 389 of SEQ ID NO:12 and wherein said mouse has platelets with an increased aggregation response to a low concentration of

thrombin compared to platelets from a mouse homozygous for the wild type GP V gene, and wherein said characteristic is hemostasis, said method comprising;

- a) administering said agent to the mouse of claim 1;
- b) maintaining said mouse for a desired period of time after said administration; and,
- c) determining whether the characteristic of said mouse that is attributable to the expression of the modified GP V gene has been affected by the administration of said agent.

29. (Previously Presented) A method of determining the effect of an agent on a characteristic of a mouse that is attributable to the expression of the GP V gene, wherein the mouse's genome has a homozygous modification with a construct which removes a sequence of GP V gene comprising nucleotides encoding Met 1 to Leu 389 of SEQ ID NO:12 and wherein said mouse has platelets with an increased aggregation response to a low concentration of thrombin compared to platelets from a mouse homozygous for the wild type GP V gene, and wherein said characteristic is coagulation, said method comprising;

- a) administering said agent to the mouse of claim 1;
- b) maintaining said mouse for a desired period of time after said administration; and,
- c) determining whether the characteristic of said mouse that is attributable to the expression of the modified GP V gene has been affected by the administration of said agent.

30. (Previously Presented) A method of determining the effect of an agent on a characteristic of a mouse that is attributable to the expression of the GP V gene, wherein the mouse's genome has a homozygous modification with a construct which removes a sequence of GP V gene comprising nucleotides encoding Met 1 to Leu 389 of SEQ ID NO:12 and wherein said mouse has platelets with an increased aggregation response to a low concentration of thrombin compared to platelets from a mouse homozygous for the wild type GP V gene, and wherein said characteristic is thrombosis, said method comprising;

- a) administering said agent to the mouse of claim 1;
- b) maintaining said mouse for a desired period of time after said administration; and,

- c) determining whether the characteristic of said mouse that is attributable to the expression of the modified GP V gene has been affected by the administration of said agent.